

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A community based collaborative knowledge system which can be connected to a plurality of client terminals via a network and which supports knowledge accumulation by categorizing and accumulating messages posted from each client terminal to a virtual community, comprising:
  - access control means for making user authentication of a client terminal as an access request source so as to permit the client terminal to post a message; and
  - community processing means for managing a virtual community in which a plurality of client terminals can participate and for categorizing and accumulating messages posted to the virtual community, from the client terminals, which are granted access permission by said access control means for respective topics, said community processing means including:
    - summary message managing means for managing summary messages which summarize and include a conclusion associated with messages accumulated in the virtual community for respective topics; and
    - user access limiting means for:

managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community,

determining accessible virtual community for each of the client terminals using a combination of the community type and member type for each virtual community as an access destination, and

providing a window which allows each of the client terminals to access the accessible virtual community.

2. (Previously Presented) A system according to claim 1, wherein said user access limiting means determines an access that a client terminal, as an access request source, can make on the basis of the combination of the community type and member type, and provides a window which allows only the determined access to the client terminal as the access request source.

3. (Previously Presented) A system according to claim 1, wherein when the virtual community has a community type "membership" for only a group of authorized members, said user access limiting means permits a user, whose member type for the virtual community is "member," to post and browse messages, and inhibits a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member," from posting and browsing messages.
4. (Previously Presented) A system according to claim 1, wherein when the virtual community has a community type "membership" for only a group of authorized members, said user access limiting means permits a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages and permits a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual community.
5. (Previously Presented) A system according to claim 1, wherein  
the community type of each virtual community includes "open" that allows everyone to participate, "membership" for only a group of authorized members; and "closed" that is not open to the public other than authorized members,  
the member type indicating the participation attribute of the user includes "member" who has been authorized to participate, "temporary

registered member” who is temporarily registered as a member,  
“intending member” who has applied to participate but has not been  
authorized to participate yet, and “other,” and

said user access limiting means determines accesses that the client  
terminal as the access request source can make on the basis of  
combinations between the “open”, “membership,” and “closed”  
community types, and the “member,” “temporary registered  
member,” “intending member,” and “other” member types.

6. (Original) A system according to claim 1, further comprising

search means for searching messages accumulated in virtual  
communities in response to a search request from the client  
terminal, and

wherein said user access limiting means provides a search  
result list consisting of message search results that  
browse authority of the client terminal as the search  
request source can cover of messages which match  
the search result on the basis of a combination of the  
community type of the virtual community which is to  
undergo search, and the member type of the client  
terminal as the search request source for the virtual  
community.

7. (Currently Amended) A user access limiting method in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network and which supports knowledge accumulation by categorizing and accumulating messages posted from each client terminal to a virtual community, comprising:

an access control step of making user authentication of a client terminal as an access request source so as to permit the client terminal to post a message; and

[[an]] a community processing step of managing a virtual community in which a plurality of client terminals can participate and of categorizing and accumulating messages posted to the virtual community, from the client terminals, which are granted access permission in the access control step for respective topics, the community processing step including:

a summary message managing step of managing summary messages which summarize and include a conclusion associated with the messages for respective topics; and

a user access limiting step of:

managing a community type indicating an open level of each virtual community and a member type indicating a participation

attribute of a user to the virtual  
community,

determining accessible virtual community for

each of the client terminals using a

combination of the community type and

member type for each virtual community

as an access destination, and

providing a window which allows each of the

client terminals to access the accessible  
virtual community.

8. (Previously Presented) A method according to claim 7, wherein the user access limiting step includes the step of determining an access that a client terminal, as an access request source, can make on the basis of the combination of the community type and member type, and providing a window which allows only the determined access to the client terminal as the access request source.

9. (Previously Presented) A method according to claim 7, wherein the user access limiting step includes the step of permitting a user whose member type for the virtual community is "member," to post and browse messages, and inhibiting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member," from posting and browsing messages, when the virtual community has a community type "membership" for only a group of authorized members.
10. (Previously Presented) A method according to claim 7, wherein the user access limiting step includes a step of permitting a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages and a step of permitting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual community, when the virtual community has a community type "membership" for only a group of authorized members.
11. (Previously Presented) A method according to claim 7, wherein the community type of each virtual community includes "open" that allows everyone to participate, "membership" for only a group of authorized members, and "closed" that is not open to the public other than authorized members,

the member type indicating the participation attribute of the user includes

“member” who has been authorized to participate, “temporary registered member” who is temporarily registered as a member, “intending member” who has applied to participate but has not been authorized to participate yet, and “other,” and

the user access limiting step includes the step of determining accesses

that the client terminal as the access request source can make on the basis of combinations between the “open,” “membership,” and “closed” community types, and the “member,” “temporary registered member,” “intending member,” and “other” member types.

12. (Previously Presented) A method according to claim 7, further comprising a search step of searching messages accumulated in virtual communities

in response to a search request from the client terminal,

wherein the user access limiting step includes a step of

providing a search result list consisting of message search results limited on the basis of a combination of the community type of the virtual community which is to undergo search and the member type of the client terminal as the search request source for the virtual community.



13. (Currently Amended) A program used in a community based collaborative

knowledge system which can be connected to a plurality of client terminals via a network and which supports knowledge accumulation by categorizing and accumulating messages posted from each client terminal to a virtual community, said program making a computer execute:

an access control step of making user authentication of a client terminal as an access request source so as to permit the client terminal to post a message; and

a community processing step of managing a virtual community in which a plurality of client terminals can participate and of categorizing and accumulating messages posted to the virtual community, from the client terminals, which are granted access permission in the access control step for respective topics, the community processing step including:

a summary message managing step of managing summary messages which summarize and include a conclusion associated with the messages for respective topics; and

a user access limiting step of:

managing a community type indicating an open level of each virtual community and a member type indicating a participation

attribute of a user to the virtual  
community,

determining accessible virtual community for

each of the client terminals using a

combination of the community type and

member type for each virtual community

as an access destination, and

providing a window which allows each of the

client terminals to access the accessible  
virtual community.

14. (Previously Presented) A program according to claim 13, wherein the user access limiting step includes the step of determining an access that a client terminal, as an access request source, can make on the basis of the combination of the community type and member type, and providing a window which allows only the determined access to the client terminal as the access request source.

15. (Previously Presented) A program according to claim 13, wherein the user access limiting step includes the step of permitting a user whose member type for the virtual community is "member," to post and browse messages, and inhibiting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member," from posting and browsing messages, when the virtual community has a community type "membership" for only a group of authorized members.
16. (Previously Presented) A program according to claim 13, wherein the user access limiting step includes a step of permitting a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages and a step of permitting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual community, when the virtual community has a community type "membership" for only a group of authorized members.
17. (Previously Presented) A program according to claim 13, wherein  
the community type of each virtual community includes "open" that allows  
everyone to participate, "membership" for only a group of  
authorized members, and "closed" that is not open to the public  
other than authorized members,

the member type indicating the participation attribute of the user includes

“member” who has been authorized to participate, “temporary

registered member” who is temporarily registered as a member,

“intending member” who has applied to participate but has not been

authorized to participate yet, and “other,” and

the user access limiting step includes the step of determining accesses

that the client terminal as the access request source can make on

the basis of combinations between the “open”, “membership”, and

“closed” community types, and the “member,” “temporary registered

member,” “intending member,” and “other” member types.

18. (Previously Presented) A program according to claim 13, further comprising

a search step of searching messages accumulated in virtual communities

in response to a search request from the client terminal,

wherein the user access limiting step includes a step of

providing a search result list consisting of message

search results limited on the basis of a combination of

the community type of the virtual community which is-

to undergo search and the member type of the client

terminal as the search request source for the virtual

community.

19. (Currently Amended) A community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and which supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community[[,]] comprising:
- access control means for making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message; and
  - community processing means for managing a virtual community in which the client terminals can participate[[,]] and for categorizing and accumulating messages posted[[,]] to the virtual community[[,]] from the client terminals, which are granted access permission by said access control means[[,]] for respective topics[[;]], said community processing means including:
    - summary message managing means for managing summary messages which summarize and include a conclusion associated with messages accumulated in the virtual community for respective topics; and
    - user access limiting means for managing a community type indicating an open level of each virtual community[[,]] and a member type indicating a participation attribute of a user to the virtual community, and[[,]]

when the virtual community has a community type "membership" for only a group of authorized members, permitting a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages[[,]] and permitting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual-community.

20. (Previously Presented) A community based collaborative knowledge system which can be-connected to a plurality of client terminals via a network and which supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to-a virtual community, comprising:

access control means for making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message;  
community processing means for managing a virtual community in which the client terminals can participate and for categorizing and

accumulating messages posted to the virtual community, from the client terminals, which are granted access permission by said access control means for respective topics; and

search means for searching messages accumulated in virtual communities in response to a full-text search request from the client terminal; said community processing means including:

user access limiting means for:

managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community and

providing a search result list consisting of message search results limited on the basis of a combination of the community type of the virtual community which is to undergo search and the member type of the client terminal as the search request source for the virtual community.

21. (Currently Amended) A user access limiting method in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network[[,]] and which supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, comprising:
- the access control step of making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message; and
  - the community processing step of managing a virtual community in which the client terminals can participate[[,]] and for categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step, for respective topics[[;]].
  - the community processing step including:
    - the summary message managing step of managing summary messages which summarize and include a conclusion associated with messages accumulated in the virtual community for respective topics; and
    - the user access limiting step of managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community, and[[,]]



when the virtual community has a community type "membership" for only a group of authorized members, permitting a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages, and permitting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual-community.

22. (Previously Presented): A user access limiting method in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a-network and which supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, comprising:

an access control step of making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message;

a community processing step of managing a virtual community in which the client terminals can participate and of categorizing and accumulating messages posted to the virtual community, from the client terminals, which are granted access permission in the access control step for respective topics; and

a search step of searching messages accumulated in virtual communities in response to a full-text search request from the client terminal, the community processing step including:

a user access limiting step of:

managing a community type indicating an open

level of each virtual community and a

member type indicating a participation

attribute of a user to the virtual

community and

providing a search result list consisting of

message search results limited on the

basis of a combination of the community

type of the virtual community which is to

undergo search and the member type of

the given client terminal as the search

request source for the virtual

community.

23. (Currently Amended) A program used in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network[[,]] and which supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, said program making a computer execute:

[[the]] an access control step of making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message; and

[[the]] a community processing step of managing a virtual community in which the client terminals can participate[[,]] and for categorizing and accumulating messages posted[[,]] to the virtual community, from the client terminals, which are granted access permission in the access control step, for respective topics[[:]], the community processing step including:

[[the]] a summary message managing step of managing summary messages which summarize and include a conclusion associated with messages accumulated in the virtual community for respective topics; and

[[the]] a user access limiting step of:

managing a community type indicating an open level of each virtual community and a member type indicating a

participation attribute of a user to the  
virtual community, and [[.]]

when the virtual community has a

community type "membership" for

only a group of authorized

members, permitting a user

whose member type for the

virtual community is "member" to

post and browse all messages

including the summary

messages[[.]] and permitting a

user whose member type for the

virtual community is unauthorized

"intending member" or

"anonymous member" to browse

only summary messages having

an open attribute of the summary

messages in the virtual

community.

24. (Currently Amended) A program used in a community based collaborative

knowledge system which can be connected to a plurality of client terminals via a network and which supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, said program making a computer execute:

- an access control step of making user authentication of a given client terminal, included among the-client terminals, as an access request source so as to permit the given client terminal to post a message;

- a community processing step of managing a virtual community in which the client terminals can participate and of categorizing and accumulating messages posted to the virtual community, from the client terminals, which are granted access permission in the access control step[[,]] for respective topics; and

- a search step of searching messages accumulated in virtual communities in response to a full-text search request from the client terminal[[:]],

- the community processing step including:

- a user access limiting step of:

- managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community and

providing a search result list consisting of

message search results [[that]] limited

on the basis of a combination of the

community type of the virtual community

which is to undergo search and the

member type of the given client terminal

as the search request source for the

virtual community.